FIG. 1

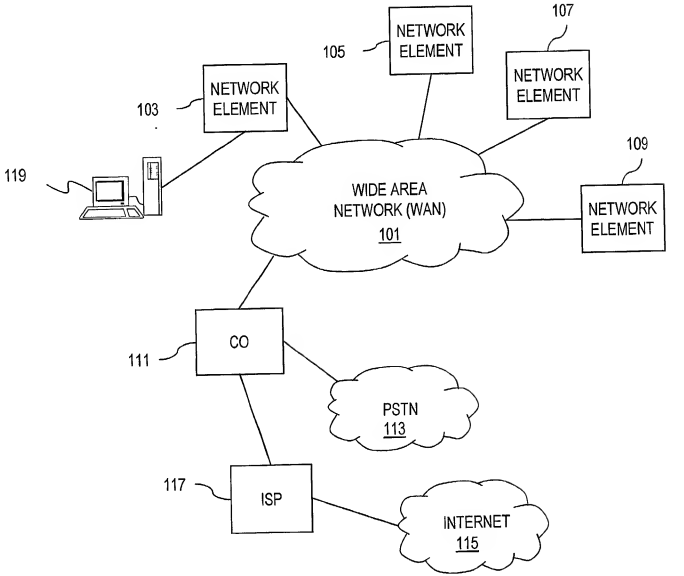

NETWORK ELEMENT
105
107
NETWORK ELEMENT
NETWORK ELEMENT
103
119
109
WIDE AREA NETWORK (WAN)
101
NETWORK ELEMENT
CO
111
PSTN
113
117
ISP
INTERNET
115

FIG. 2

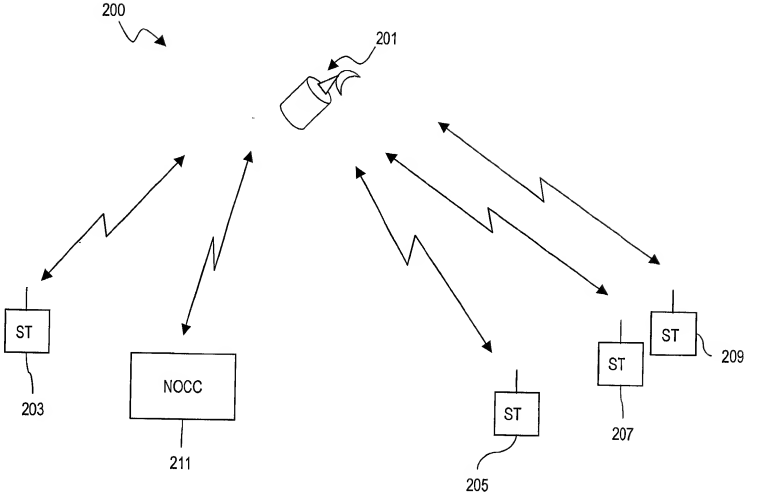


FIG. 3

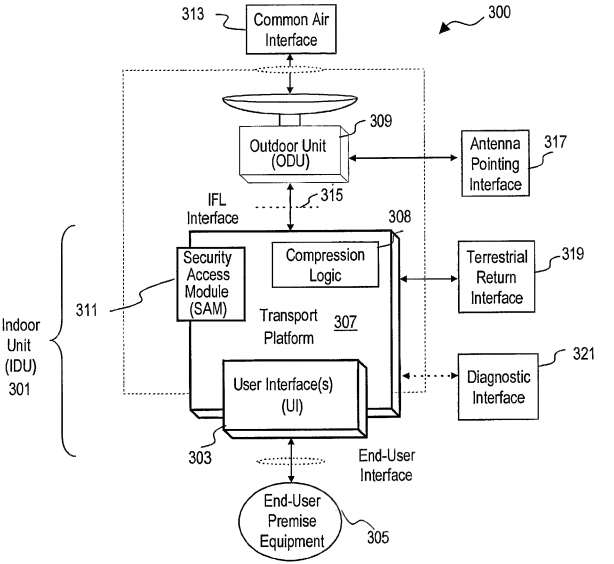

313
Common Air Interface
300
309
Outdoor Unit (ODU)
Antenna Pointing Interface
317
IFL Interface
315
308
Security Access Module (SAM)
Compression Logic
Terrestrial Return Interface
319
311
Transport Platform
307
Indoor Unit (IDU) 301
User Interface(s) (UI)
Diagnostic Interface
321
303
End-User Interface
End-User Premise Equipment
305

FIG. 4

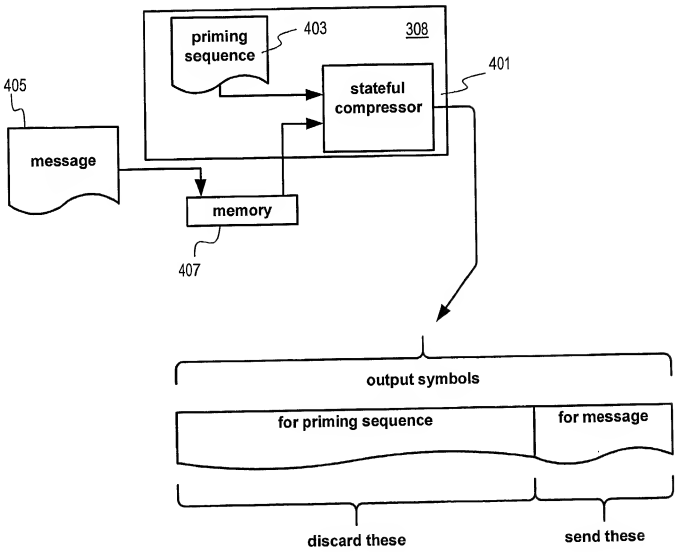

priming sequence
403
308
401
stateful compressor
405
message
memory
407
output symbols
for priming sequence
for message
discard these
send these

FIG. 5

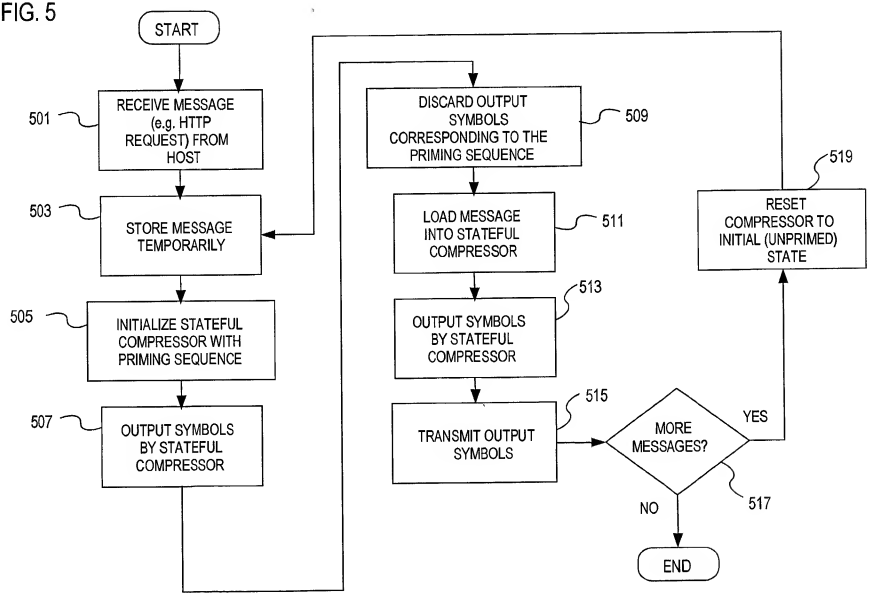

START
501
RECEIVE MESSAGE (e.g. HTTP REQUEST) FROM HOST
503
STORE MESSAGE TEMPORARILY
505
INITIALIZE STATEFUL COMPRESSOR WITH PRIMING SEQUENCE
507
OUTPUT SYMBOLS BY STATEFUL COMPRESSOR
509
DISCARD OUTPUT SYMBOLS CORRESPONDING TO THE PRIMING SEQUENCE
511
LOAD MESSAGE INTO STATEFUL COMPRESSOR
513
OUTPUT SYMBOLS BY STATEFUL COMPRESSOR
515
TRANSMIT OUTPUT SYMBOLS
MORE MESSAGES?
YES
NO
517
519
RESET COMPRESSOR TO INITIAL (UNPRIMED) STATE
END

FIG. 6A

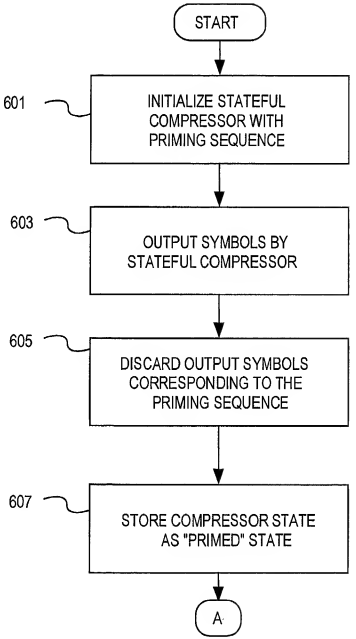

START
601
INITIALIZE STATEFUL COMPRESSOR WITH PRIMING SEQUENCE
603
OUTPUT SYMBOLS BY STATEFUL COMPRESSOR
605
DISCARD OUTPUT SYMBOLS CORRESPONDING TO THE PRIMING SEQUENCE
607
STORE COMPRESSOR STATE AS "PRIMED" STATE
A

FIG. 6B

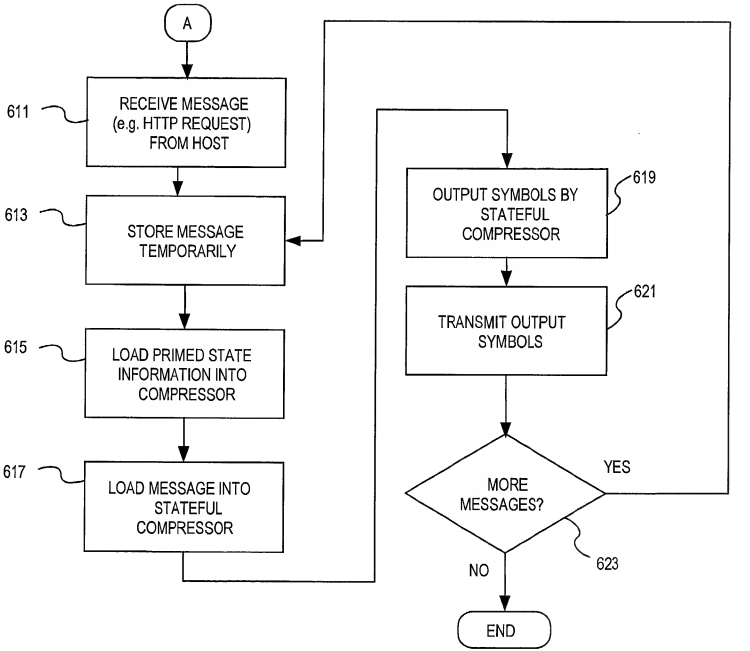
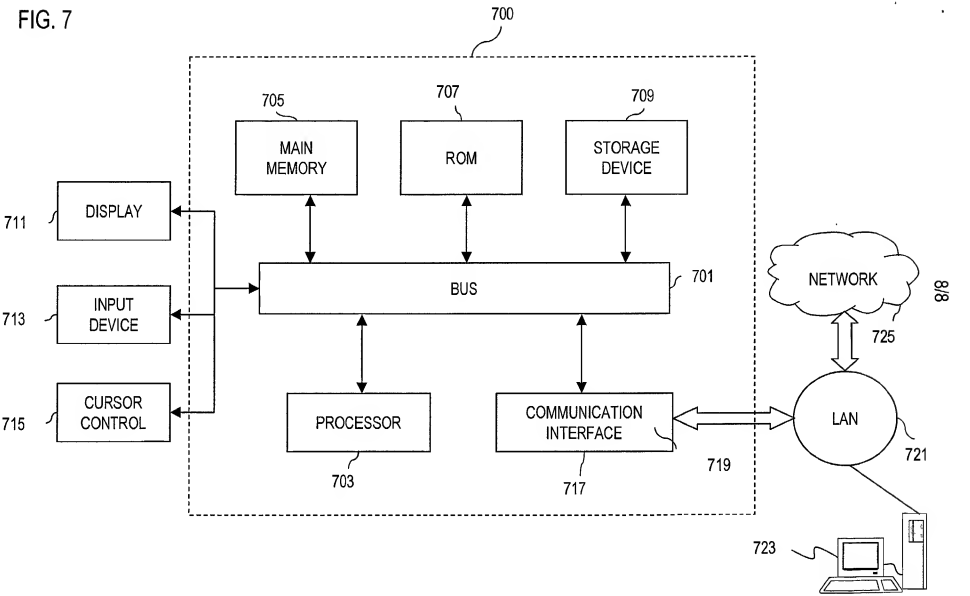

A
611
RECEIVE MESSAGE (e.g. HTTP REQUEST) FROM HOST
613
STORE MESSAGE TEMPORARILY
615
LOAD PRIMED STATE INFORMATION INTO COMPRESSOR
617
LOAD MESSAGE INTO STATEFUL COMPRESSOR
619
OUTPUT SYMBOLS BY STATEFUL COMPRESSOR
621
TRANSMIT OUTPUT SYMBOLS
MORE MESSAGES?
YES
NO
623
END

FIG. 7


700
705
MAIN MEMORY
707
ROM
709
STORAGE DEVICE
711
DISPLAY
713
INPUT DEVICE
715
CURSOR CONTROL
BUS
701
PROCESSOR
703
COMMUNICATION INTERFACE
717
719
NETWORK
725
LAN
721
723